



## **Renaissance Computing Institute (RENCI)**

### **Regional Growth Mapping & Forecasting: 1976-2040**

#### *3-County Triangle Area: Durham, Orange, & Wake*

#### *Results Summary*

The 16-county expansion of Regional Growth Mapping and Forecasting into the Greater Triangle and Rocky Mount region includes the three-county Triangle area of **Durham, Orange, and Wake** Counties. This analysis is part of the third phase in a series that will eventually encompass the entire state; the first phase focused on 24 counties in the Southern Piedmont/Charlotte Metro region, and the second phase focused on 19 counties in Western North Carolina. Regional-level research findings for the 3-county Triangle area are summarized on this page, with county-level results to follow.

#### **Findings for the three-County Triangle area:**

- ◆ According to the U.S. Census Bureau, the Triangle region has a total land area of 1,502 square miles.
- ◆ According to the North Carolina Office of State Budget and Management, the population in the Triangle increased nearly 130 percent between 1976 and 2005, from 488,600 to 1,115,572 people, respectively.
- ◆ Development, or the number of acres converted from natural and agricultural land to developed land, increased nearly 650 percent between 1976 and 2005, at an average rate of 11 acres per day.
- ◆ Total developed acres increased from 18,286 acres in 1976 to 136,682 acres in 2005.
- ◆ Development in the Triangle outpaced population growth 5-to-1 between 1976 and 2005.
- ◆ In 1976, 1.9 percent of the Triangle was considered developed and 98.1 percent remained undeveloped.
- ◆ In 1985, 3.0 percent of the Triangle was considered developed and 97.0 percent remained undeveloped.
- ◆ In 1995, 5.6 percent of the Triangle was considered developed and 94.4 percent remained undeveloped.
- ◆ By 2005, 14.2 percent of the Triangle was considered developed and 85.8 percent remained undeveloped.
- ◆ Researchers forecast an additional 211,083 acres of development in the Triangle by 2040, a 154 percent increase in developed acres, at an average rate of 17 acres per day.
- ◆ Total developed land in the Triangle is forecast to increase to 36.2 percent of the region by 2040 with 63.8 percent remaining undeveloped.
- ◆ The population of the Triangle is projected to increase from 1,115,572 to 2,298,086, a 106 percent increase, between 2005 and 2040.
- ◆ In 1976, the individual need for land, also called per capita land consumption or “development footprint,” in the Triangle was 0.04 acres per person.
- ◆ In 2005, per capita land consumption in the Triangle had increased to 0.12 acres per person, a 200 percent increase from 1976.
- ◆ By 2040, per capita land consumption in the region is forecast to increase to 0.15 acres per person, a 25 percent increase from 2005.